

DB Library Users Manual

This Manual explains how to use DB Library with easy to understand example. Reading this manual may help you understanding functions and usage of DB Library. Same contents are written in Help file too, therefore when you encounter problem in the future, please refer Help file included in the program.

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Components of DB Library

- DB Library Encoder : Input data on Microsoft Excel files to database by drag & drop file to the program.

(In this case “data” is like Input/Output quantity of a production line in your factory, table of defect name and quantity, and so on.)

- DB Library Reporter : Get necessary data from database and fill Microsoft Excel format. This program can make reports automatically as you scheduled, and deliver report by email.

(In this case “reports” is like Weekly/Monthly quality report generated from the “data” mentioned above.)

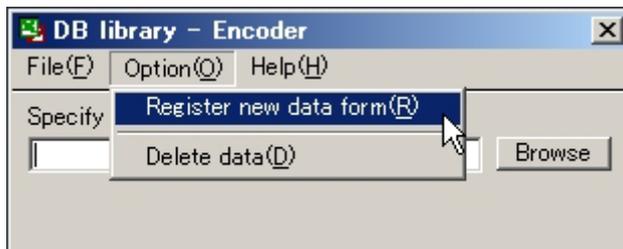
- DB Library add in : Add in program for your Microsoft Excel. When you install DB Library Encoder, this add in will be installed automatically. This will enables to transfer data on Excel format by just clicking a DB Library button on your Microsoft Excel menu bar.

DB Library Encoder : Register New Excel data form

First of all, you need to register your Excel data format to DB Library Encoder.

Each data format is recognized by the file name, for example, if you register a data format "Sample.xls", everytime when you drag and drop "Sample.xls" with data, DB Library Encoder will read the data as you specified when you register the format. It means you should not change file name of the data format once you register it. All encoded (by drag and drop) data format will be saved to the data location you specified with unique file name (Date+Time+Sample.xls) so you don't have to save the file with different file name manually.

1. Click "Register new data form" from Option Menu.



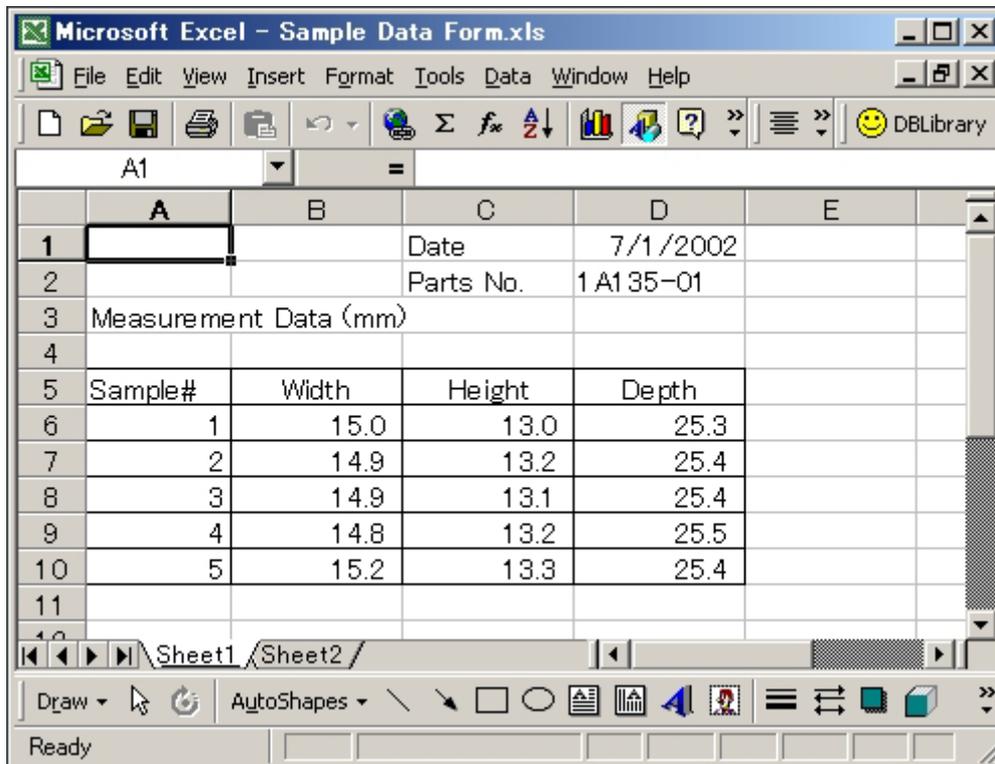
2. Drag & Drop your new data format, or Click Browse button to point the file.



3. Input necessary information to "Register new data form" window

This is an example for a data form "Sample Data Form.xls".

"Sample Data Form.xls"



There are 2 kinds of data on the form. One is single cell data such as "Date" and "Parts No.", the other one is data with X, Y Parameter "Measurement Data(mm)". All those data labels and areas must be registered now because you need those parameters to make a report later.

(1) Register "Date" cell

- Input "Date" to 'Data Name' box.
- Choose Data Area Worksheet "Sheet1"
- Input "D1" to 'from' box. (Note : D1 is a address of the data itself, not an address of "Date")
- Push 'Next >>' button

IMPORTANT : You should use Date/Time format for Date data cell on Excel for properly recognizing it is date, not text data.

DB library - Register new data form

Register Data labels and areas Data No. 1

Data

Data Name Date

Data Area Worksheet Sheet1 from D1 to

Parameter

X

Parameter1 Name from to

Parameter2 Name from to

Parameter3 Name from to

Y

Parameter1 Name from to

Parameter2 Name from to

Parameter3 Name from to

<< Prev Next >> Finish

(2) Register "Parts No." cell

- Input "Parts No." to 'Data Name' box.
- Choose Data Area Worksheet "Sheet1"
- Input "D2" to 'from' box
- Push 'Next >>' button

(3) Register "Measurement Data" cells

Register Data area

- Input "Measurement Data" to 'Data Name' box
- Choose Data Area Worksheet "Sheet1"
- Input "B6" to 'from' box
- Input "D10" to 'to' box (Data area is from B6 to D10. Do not include X, Y parameter area to this)

Register X Parameter

- Input "Measuring Point" to 'X Parameter1 Name' box
- Input "B5" to 'from' box
- Input 'D5' to 'to' box

Register Y Parameter

- Input "Sample#" to 'Y Parameter1 Name' box
- Input "A6" to 'from' box
- Input "A10" to 'to' box
- Click 'Finish' button

DB library - Register new data form

Register Data labels and areas Data No. 3

Data

Data Name Measurement Data

Data Area Worksheet Sheet1 from B6 to D10

Parameter

X

Parameter1 Name Measuring Point from B5 to D5

Parameter2 Name from to

Parameter3 Name from to

Y

Parameter1 Name Sample# from A6 to A10

Parameter2 Name from to

Parameter3 Name from to

<< Prev Next >> Finish

Now "Sample Data Form.xls" is registered to DB Library Encoder.

When you drag and drop "Sample Data Form.xls" with data to DB Library Encoder, it will encode data to database. In this case, data to be encoded are

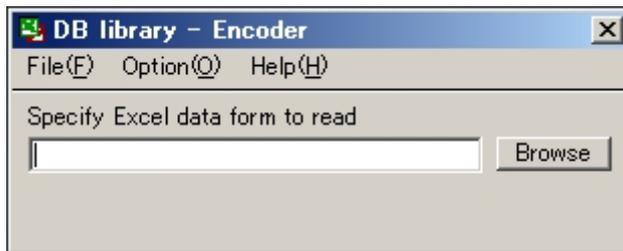
1. Date : 2002/07/01
2. Part No. : 1A135-01
3. Measurement Data : 15.0 at X (Measuring point)=Width, Y (Sample#)=1
4. Measurement Data : 14.9 at X (Measuring point)=Width, Y (Sample#)=2
5. Measurement Data : 14.9 at X (Measuring point)=Width, Y (Sample#)=3
6. Measurement Data : 14.8 at X (Measuring point)=Width, Y (Sample#)=4
7. Measurement Data : 15.2 at X (Measuring point)=Width, Y (Sample#)=5
8. Measurement Data : 13.0 at X (Measuring point)=Height, Y (Sample#)=1
9. Measurement Data : 13.2 at X (Measuring point)=Height, Y (Sample#)=2
10. Measurement Data : 13.1 at X (Measuring point)=Height, Y (Sample#)=3
11. Measurement Data : 13.2 at X (Measuring point)=Height, Y (Sample#)=4
12. Measurement Data : 13.3 at X (Measuring point)=Height, Y (Sample#)=5
13. Measurement Data : 25.3 at X (Measuring point)=Depth, Y (Sample#)=1
14. Measurement Data : 25.4 at X (Measuring point)=Depth, Y (Sample#)=2
15. Measurement Data : 25.4 at X (Measuring point)=Depth, Y (Sample#)=3
16. Measurement Data : 25.5 at X (Measuring point)=Depth, Y (Sample#)=4
17. Measurement Data : 25.4 at X (Measuring point)=Depth, Y (Sample#)=5

Encode Data to Database

There are 3 method of encoding data from Excel file to Database.

1. Drag & Drop file to DB Library Encoder

You can drag and drop file from Windows Explorer to running DB Library Encoder. If the file name matches to the registered forms, DB Library Encoder opens the Excel file and read data automatically. If the form is not registered yet, form registration windows will appear.

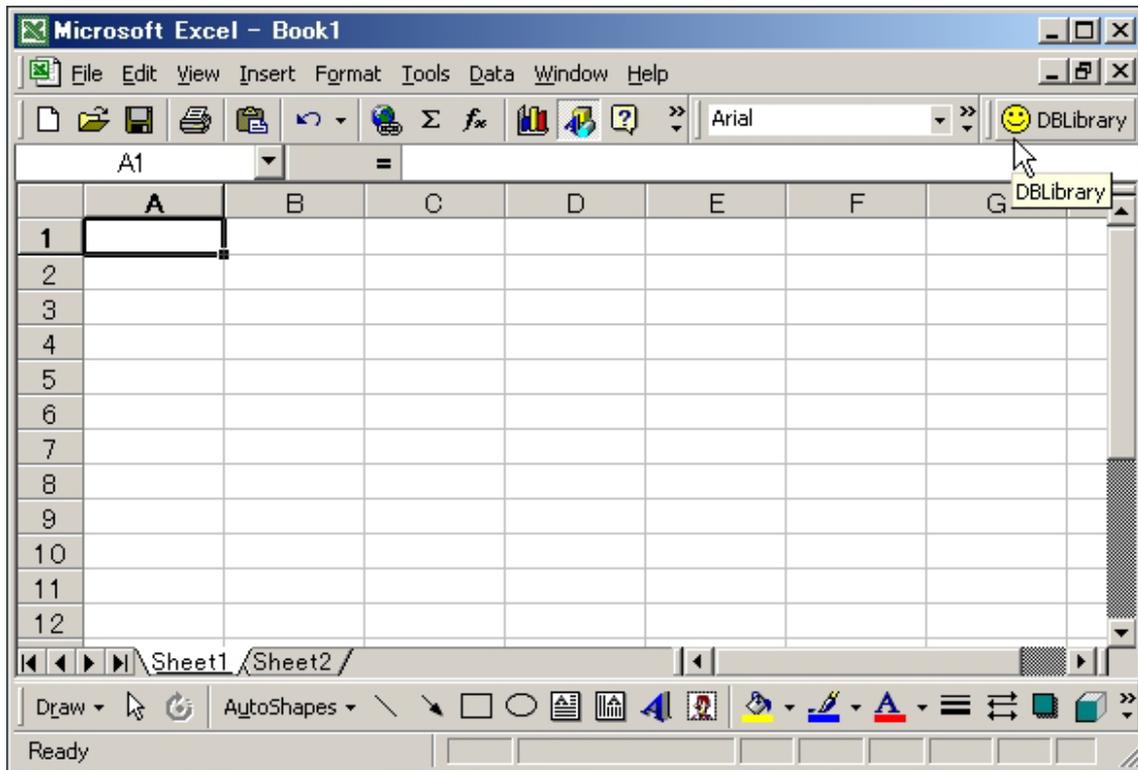


2. Drag & Drop file to DB Library Encoder shortcut

When you install DB Library Encoder, a short cut icon is appeared on your desktop. You can drag and drop your Excel file to the icon to open DB Library and read data from the Excel file.

3. Use Excel Add in

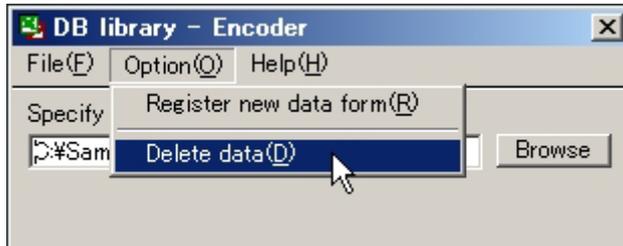
When you install DB Library Encoder, Microsoft Excel Add In named DB Library is installed automatically. When you finished inputting data to the Excel format, just click DB Library button on your Excel tool bar to transfer data to Database.



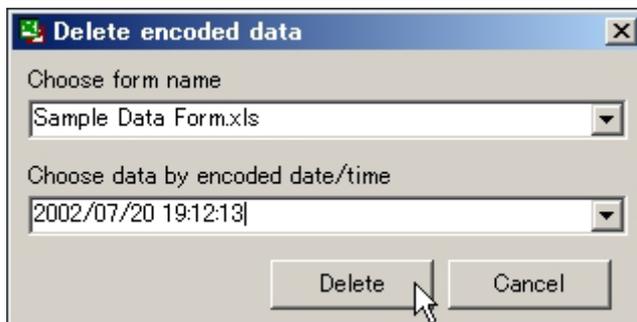
Delete data

If you mistakenly encoded data, you can delete it by the following method.

1. Click "Delete data" from "Option" menu



2. Choose Excel data form name and the date/time of encoding.

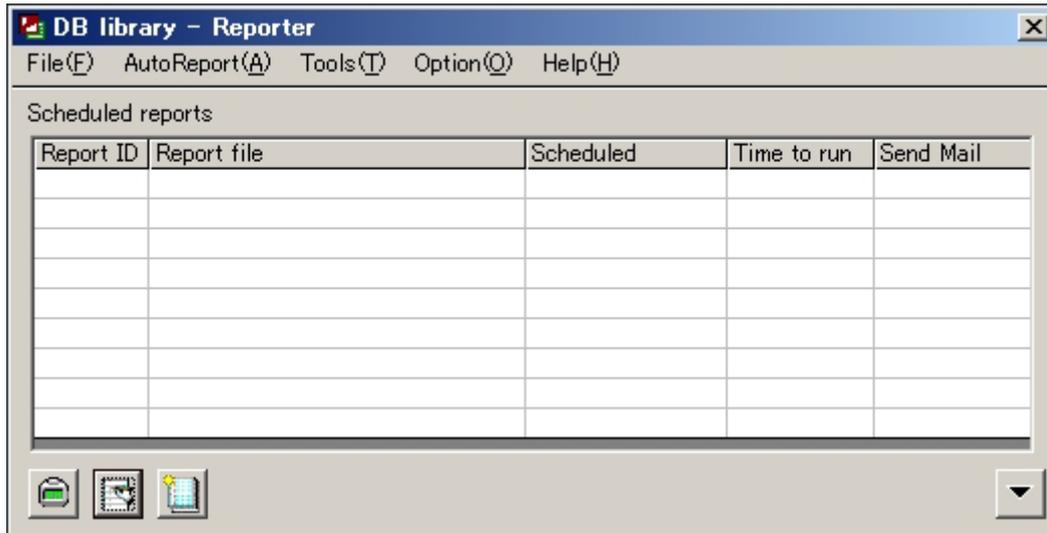


Note : When you will make a report by DB Library Reporter, the program choose LATEST data encoded if there are 2 or more data that matches to your query. Therefore, you don't have to delete the data if you drag and drop corrected data again. However, if your report contain Special function such as "Average" and/or "Standard deviation", the results may be wrong because the number of sample data includes the one you mistakenly encoded. If you are using those functions in your report, deleting mistakenly encoded data is recommended.

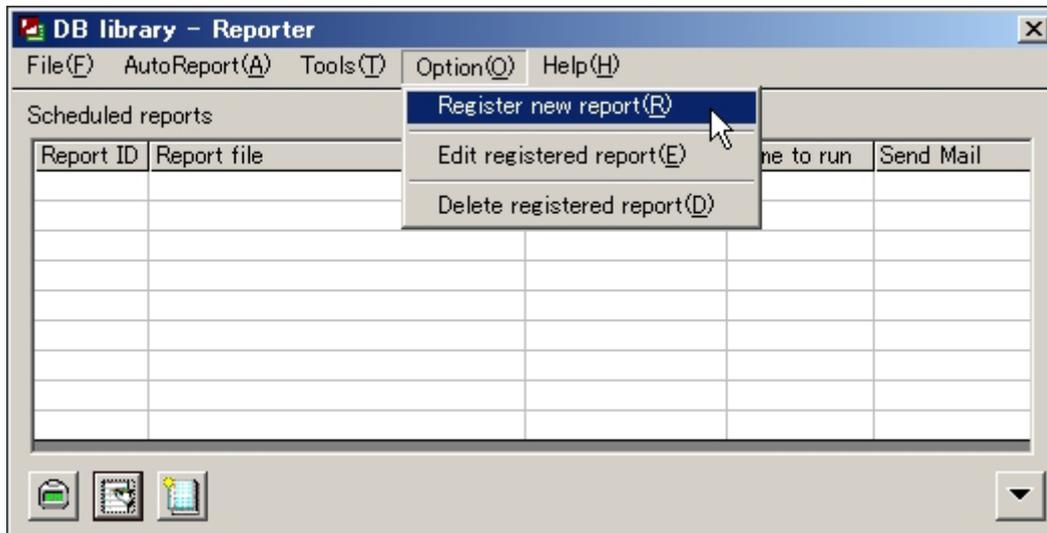
DB Library Reporter : Register New Excel Report form

First of all, you need to register your Excel report format to DB Library Reporter.

Once you register report format, you can make a report instantly by clicking "Manual Reporting" button , or you can schedule periodical auto report function .



1. Click "Register new report" from "Option" Menu, or .

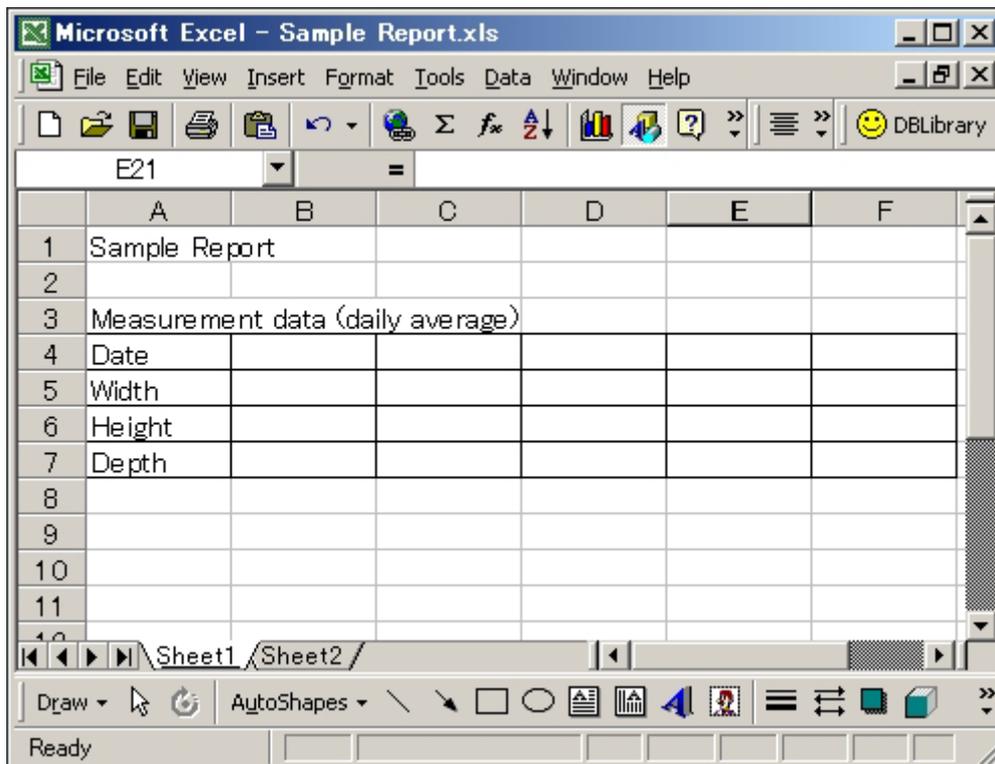


2. Drag & Drop your Excel report format, or click Browse button to point the file



3. Input necessary information to "Register new report form" window

This is an example for a report form "Sample Report.xls"



To fill data to the table "Measurement data (daily average)" from encoded data "Sample Data Form.xls", follow the procedure below.

Note : Please refer "DB Library Encoder : Register New data form" written above about the structure of "Sample Data Form.xls"

(1) Register data area

1st step is to choose data pattern. 'Register new report form' has 2 options to choose data pattern. One is 'data for single cell', and the other one is 'data for specific data area'. If you want to get a data for one cell, you should choose 'data for single cell'. If you want to fill table, choose 'data for specific data area' option.

The screenshot shows a dialog box titled "DB library - Register new report form". The main heading is "Register Data area / cells". Under "Choose data pattern", there are two radio buttons: "data for single cell" (which is selected) and "data for specific data area". Below this, the "Register data for single cell" section is active. It contains a "Select Cells and Data" tab with the following fields: "Data No." (text box with "1"), "Worksheet" (dropdown menu), "Target cell" (text box), "Data from (Excel file name)" (dropdown menu), "Data Name (from Excel form)" (dropdown menu), and "Special function" (dropdown menu). At the bottom of the dialog are three buttons: "<< Prev", "Next >>", and "Finish".

In this case, choose 'data for specific data area' option to fill the table.

(2) Input necessary information to 'Select Cells and Data' tab.

Data area

- Choose Worksheet "Sheet1". (Because the table is on Sheet1)
- Input "B5" and "F7" to 'Target data are from' and 'to'. Those are address of data area. Do not include X, Y parameter area.
- Choose 'Data from (Excel file name)'. Since the data source is "Sample Data Form.xls" in this case, choose it.
- Choose 'Data Name (from Excel form)' "Measurement Data". This is data label registered to DB Library Encoder.
- Choose 'Special function' "Average" to fill average data to the table.

Parameter X

Since X parameter of the table is "Date", input as follows.

- Choose option 'Read from database and fill cells' to get available date data from database.

- Choose 'Name' "Date"
- Input "B4" and "F4" to 'Fill/Refer data' box.
- Choose 'Sorted by' "A -> Z"
- Choose 'If the data is Date/Time, specify period' "last week" (If it is weekly report)

(Note : If there is no valid data for the period specified, the table on the report will be left blank. When you try to make report manually or automatically as testing function of this program, please encode valid data for the period by DB Library Encoder.)

Parameter Y

Since Y parameter of the table is "Measuring point", input as follows.

- Choose 'Refer cells to choose data for table' to use "Width", "Height" and "Depth" as a condition to choose data from database.
- Choose 'Name' "-Parameter_X1-Measuring Point". This means "Measuring Point" had been registered as X1 parameter when encoding data by DB Library Encoder.
- Input "A5" and "A7" to 'Fill/Refer data' box.

DB library - Register new report form

Register Data area / cells

Choose data pattern

data for single cell data for specific data area

Register data for table style cells

Select Cells and Data Query

Data No. Worksheet Target data area from to

Data from (Excel file name) Special function

Data Name (from Excel form)

Parameter X

Read from database and fill cells Refer cells to choose data for table None

Name Sorted by None A -> Z Z -> A

Fill/Refer data from to

If the data is Date/Time, specify period

Parameter Y

Read from database and fill cells Refer cells to choose data for table None

Name Sorted by None A -> Z Z -> A

Fill/Refer data from to

If the data is Date/Time, specify period

<< Prev Next >> Finish

Set Query

For making report by data satisfying specific condition, use "Query" tab to set the condition.

All conditions inputted in this Query tab are considered as "AND" logic.

- Choose "Parts No.", "=", "1A135-01"
- Click 'Finish' button

DB library - Register new report form

Register Data area / cells

Choose data pattern

data for single cell data for specific data area

Register data for table style cells

Select Cells and Data **Query**

Condition to choose data

Parts No. = 1A135-01

Specify period if data is Date/Time = NA

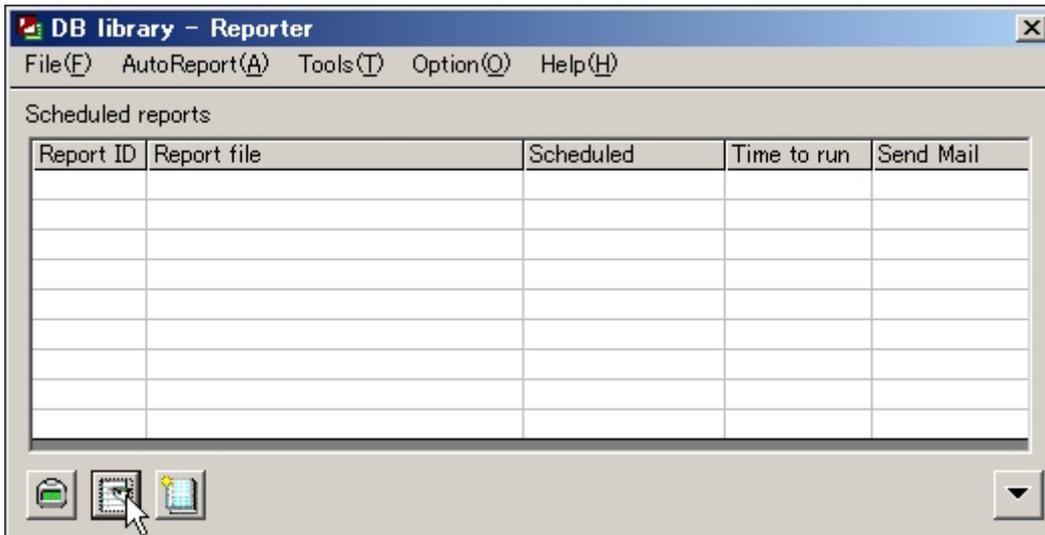
<< Prev Next >> Finish

Note : Choice that you can choose will be filled automatically to the boxes.

Making report manually

Once you register a report format, you had better to try making a report before you schedule auto reporting.

1. Click Manual Reporting button

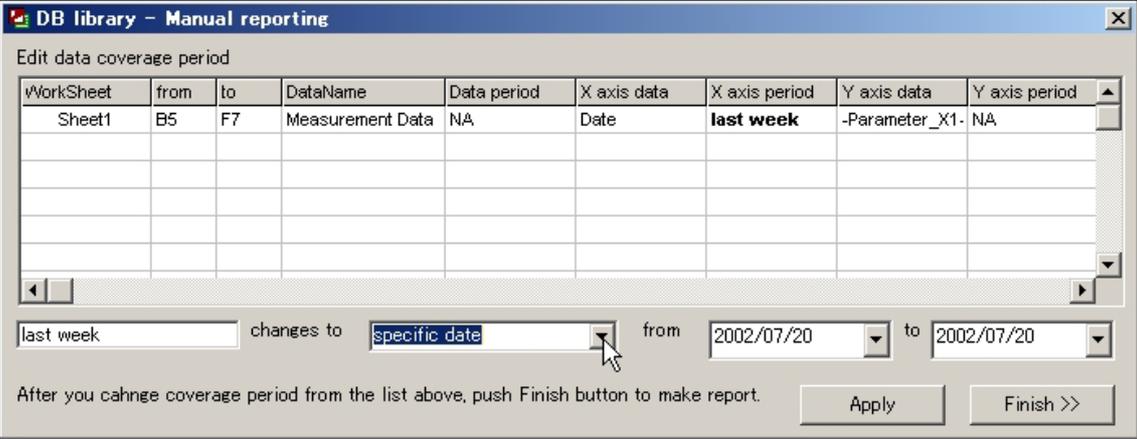


2. Choose a report name, then push 'Next >>'



3. Change coverage period if necessary.

If the report has Date parameter, you will see BOLD letter on the table. If you want to change coverage period, click the BOLD letter, choose new period from 'changes to' box. When you push 'Apply', changes will be reflected on the table. Click 'Finish >>' button to make report.



DB library - Manual reporting

Edit data coverage period

WorkSheet	from	to	DataName	Data period	X axis data	X axis period	Y axis data	Y axis period
Sheet1	B5	F7	Measurement Data	NA	Date	last week	-Parameter_X1-	NA

last week changes to **specific date** from 2002/07/20 to 2002/07/20

After you cahnge coverage period from the list above, push Finish button to make report.

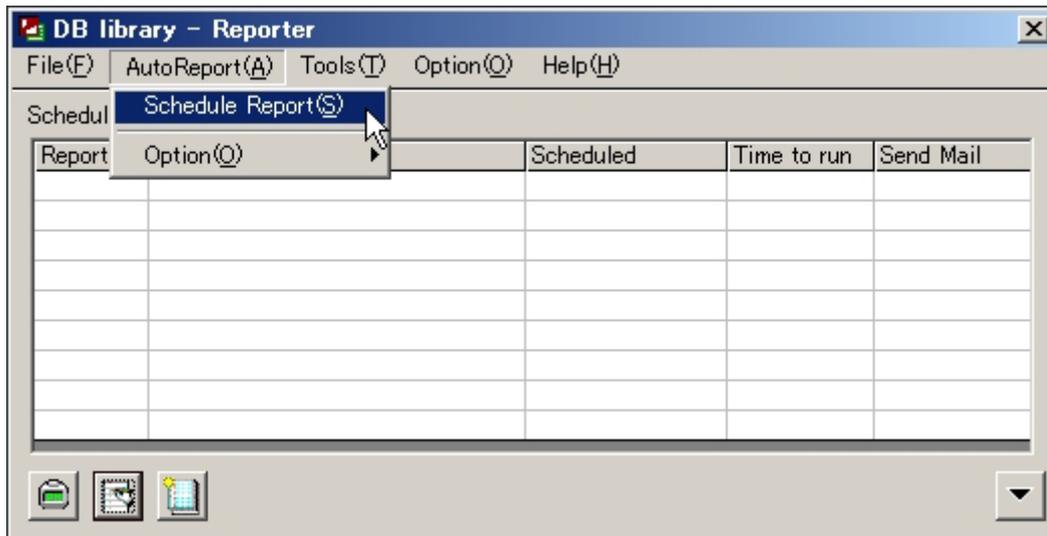
Apply Finish >>

4. Microsoft Excel runs automatically and the report will be saved to the data location you specified.

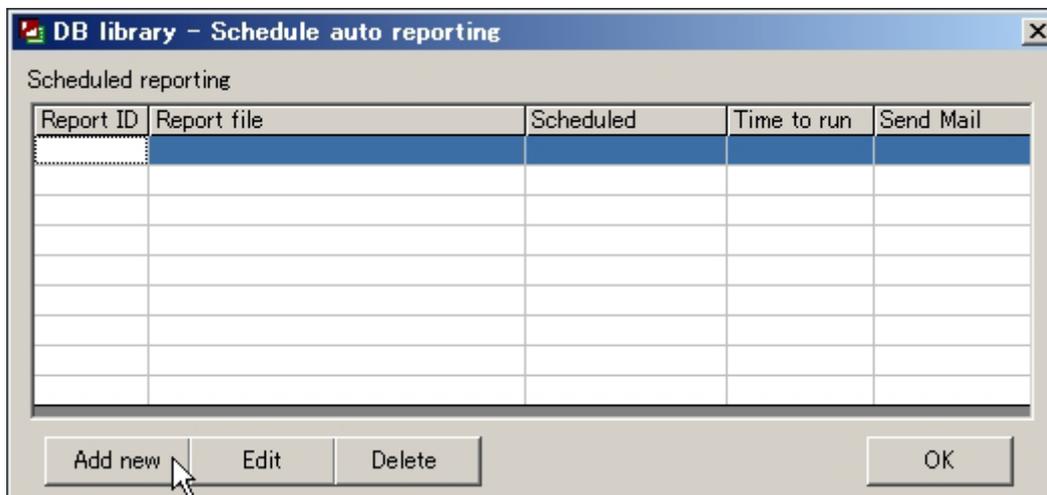
Schedule auto reporting

Once you register Excel report form, you can schedule auto reporting.

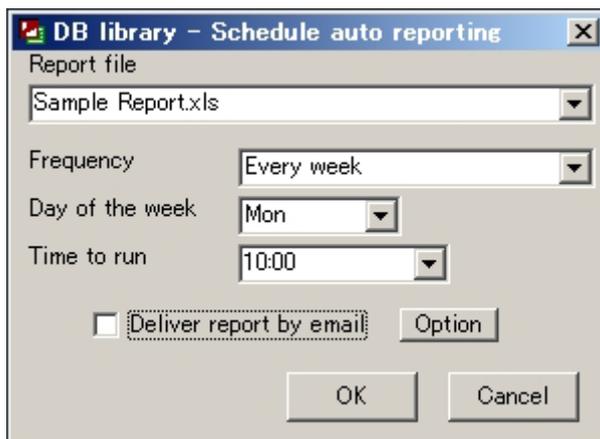
1. Click "Schedule Report" from "AutoReport" menu, or Click .



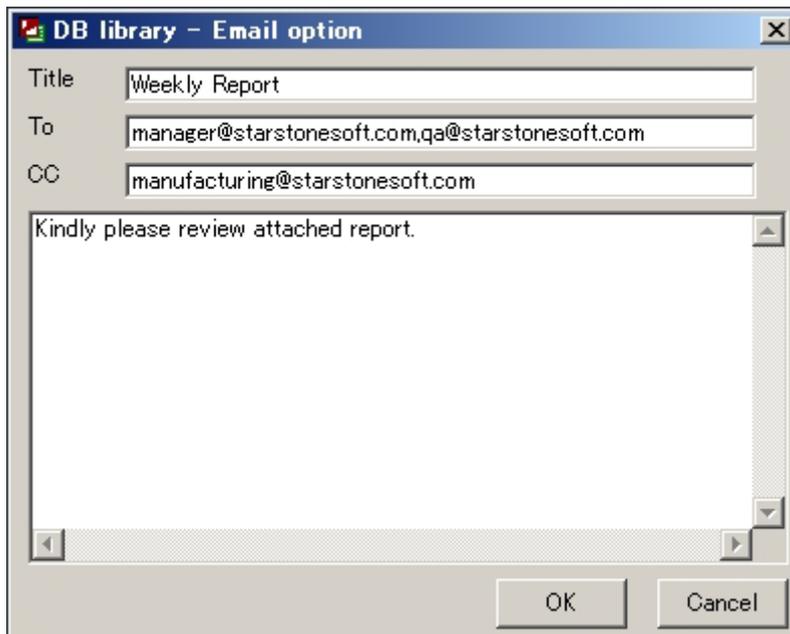
2. Push 'Add new' button to schedule new reporting.



3. Choose Report file name, Frequency and schedule. If you want to deliver report by email, check 'Deliver report by email' check box.. When you click this (or click Option button), you can edit Subject, Recipient and Body of the mail.



4. Each scheduled auto reports can have individual mail setting. If you want to compress attachment report file, check "Compress report by WinZip". After you filled the window, Click 'OK' to close.

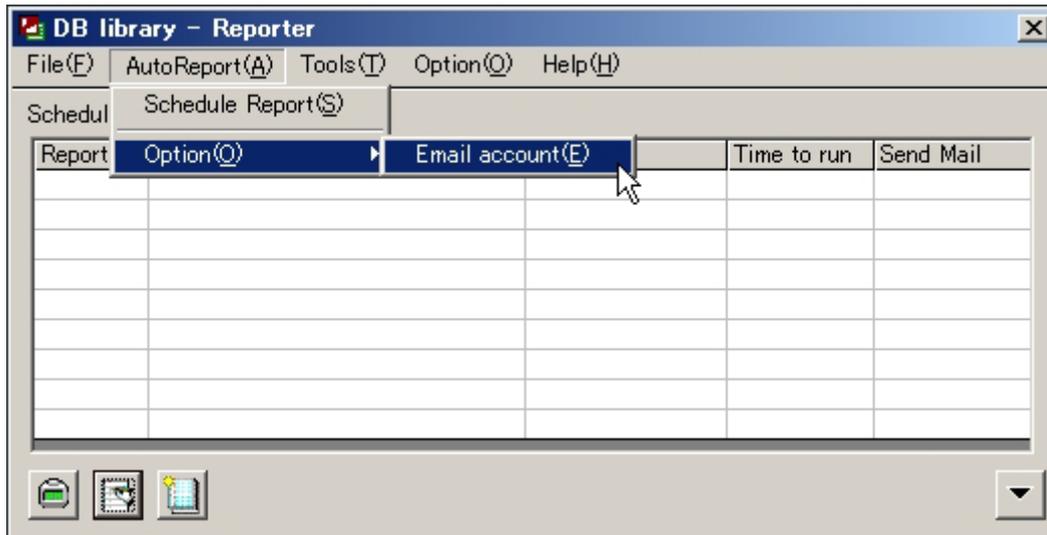


5. Scheduled report is appeared on 'Schedule auto reporting' window. You can edit schedule by clicking 'Edit' button anytime. If there are 2 or more scheduled report on the table, please click 1 report before you click 'Edit' or 'Delete' button.

Using email delivery option

If you use auto reporting with email delivery function, you need to setup email account option.

1. Click AutoReport - Option - Email account' menu.



2. Enter SMTP server name, your domain name and mail address to be used for sending report.

SMTP(Simple Mail Transfer Protocol) server name is usually provided from your Internet Service Provider, or if your Local Area Network has own mail server, your network administrator knows it. You can use Server name or IP address (example : 192.168.0.1).

Your domain is the name appeared right side from @ of your mail address.

If you can connect to SMTP Server via LAN, click 'OK' to close. If you need to use Dialup connection to connect to the server, check 'Use dialup connection to reach to mail server' check box.



3. Choose Entry, input User name and Password to 'Dialup connection window'. After you complete this setting, every time when scheduled report run, DB Library Reporter automatically dialup to remote host and send email. If any error occur including the line is busy while dialing, automatically redial up to 10 times. If still not be able to connect, message box appear on your desktop to notify the problem.



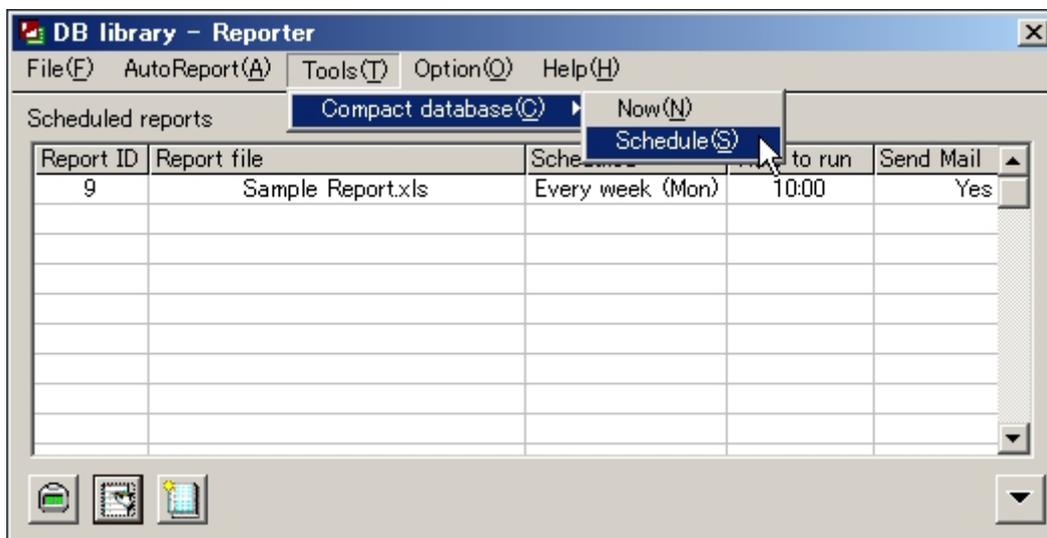
Compact database

When the database file size becoming bigger, response for data access becoming slower. To prevent lowering performance, periodical compact database is recommended.

Note : Compact database does not change content of the data in the database. It will shrink size of the database.

1. Schedule compact database

You can schedule periodical compact database by clicking 'Tools' - 'Compact database' - 'Schedule' menu.



2. Compact now

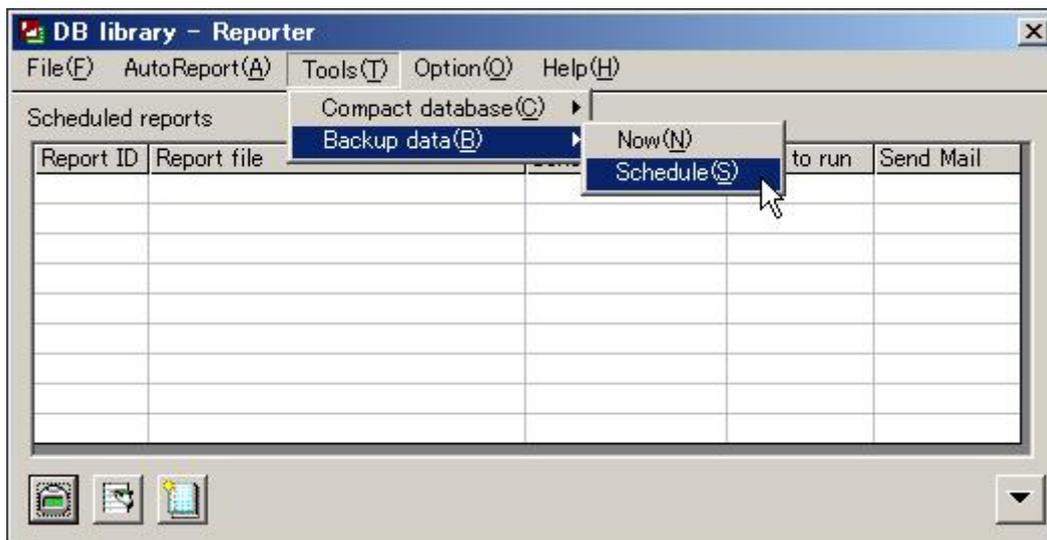
Also you can choose 'Tools' - 'Compact database' - 'Now' to backup immediately.

Backup data

Excel data files, report files and database under "DBLibrary_Data" can be backed up by the following procedure. Backing up data is very important because it may be broken by hardware problem, or deletion by human error. Periodical backing up is recommended.

1. Schedule Backup

You can schedule periodical backup by clicking 'Tools' - 'Backup data' - 'Schedule' menu.



2. Backup now

Also you can choose 'Tools' - 'Backup data' - 'Now' to backup immediately.

3. Restore backup

If your data is broken, you can extract backup file "(-date-time-)DBLibrary_Data.zip" to the original location to restore latest backup set.

Hide to task bar

If scheduled auto reporting disturbs work on the PC, you can choose 'Hide to task bar' option.



Click  button to hide DB Library Reporter to Task bar. Once it is hidden in Task bar, scheduled auto report will be made invisibly.

Right click DB Library Reporter Icon in Task tray to restore program on your desktop.

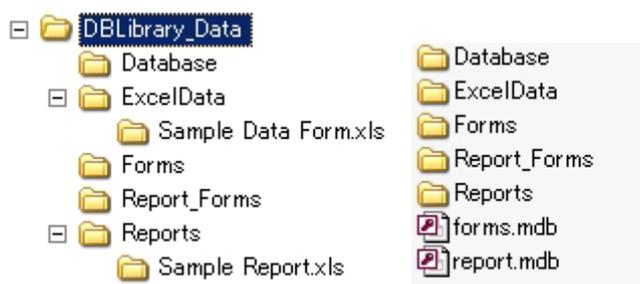
To register DB Library Reporter shortcut to your Startup menu is recommended to avoid forgetting to run auto report.

Data storage location

DB Library Encoder and DB Library Reporter makes some folders in the data location you specified.

When you run DB Library Encoder first time, DB Library Encoder makes folder 'DBLibrary_Data' under your specified location. Also 'Database', 'ExcelData' and 'Forms' Folder will be made. Under DBLibrary_Data folder, 'forms.mdb' system database file will be stored.

When you run DB Library Reporter first time, DB Library Reporter makes folder 'Report_Forms' and 'Reports' under 'DBLibrary_Data' folder. Also 'report.mdb' system database file will be stored.



Location of data

1. Excel data

Encoded Excel data will be stored in 'Excel Data' folder. Each registered data forms have individual folder under the 'Excel data' folder, and Excel data file will be stored under the folder with Date + Time headings before the file name.

2. Encoded data

All Encoded data will be stored in the database file "*.mdb" in 'Database' folder. Each data format have individual database file with the data form name + file extension ".mdb".

3. Generated reports

All generated reports are stored in 'Reports' folder. Each registered report forms have individual folder under 'Reports' folder, and Excel report file will be stored under the folder with Date + Time headings before the file name.